Treatise of Internal Stellar Dynamics Featuring Fusion-Fission-Fusion Repeating Cycle - Excludes Possibility of Neutron Stars - Includes Synthesis of Elements as Heavy as Copper within Stars with Copper as Primary Instigator of Supernovae

18 July 2024
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Introduction

There remain many open questions which masquerade as decided science, particularly in the realm of understandings concerning the dynamics internal to stars. As we have never sent probes into the interior of a star, we cannot pretend to know with certainty what is going on there. This has not prevented generations of astronomers from declaring with certitude that they know the exact temperature of the core of the Sun, that they know which elements are synthesized by fusion reactions within stars and which are not, et cetera.

This author has already written revisions to the standard model concerning elemental synthesis, explaining that elements as heavy as copper (in small quantities and only in certain cases) are made within the centers of stars while heavier elements come from the interior of our own planet in a slow and steady form of fusion which requires saltwater and high pressures over long periods of time and requires vulcanism in order to disperse these elements upon the crust of the Earth where they may be found. These heavier elements are not synthesized within neutron star collisions as has been widely agreed upon by astronomers for decades. The best evidence against this is the fact that uranium, if it were projected at sub-relativistic velocities along with other heavy elements toward our planetary system prior to its formation, would have decayed long before having time to cover the interstellar distances.

Beyond this point, there are other inaccuracies in our standard model of internal stellar dynamics which are in sore need of correction which will be addressed here.

Abstract

Current doctrine holds that stars, depending upon their size, begin as ordinary stars and eventually go on to become neutron stars (in the case of moderately large stars) later in their life-cycles. The doctrine goes on to state that these neutron stars eventually collapse into singularities in the case of extremely large stars. All of these assumptions are, in this author's judgment, based upon specious reasoning.

Current doctrine is also wrong concerning the nature of singularities and most importantly, their mass. The doctrine holds that the mass of singularities is so great that they draw in everything around them in short order. This doctrine states that a star could not coexist with a singularity and would be destroyed by

it. This author was, if not the first, then certainly amongst the first to seriously suggest that singularities are at the heart of all stars and are essential to their structural integrity.

It is, firstly, important to understand when discussing this topic the fact that singularities have very little mass but are bestowed with extreme attractive ability only through the strong nuclear force. Singularities are composed chiefly of odderons which feature exponentially greater attractive force for each additional gluon added to each of two odderon packets. In extreme cases i.e. singularities, two odderon packets dance around one another at high velocity, treating surrounding matter as a garbage disposal treats food. This results in the packets having a greater longevity as they are given a source of new gluons. The main difference between a standard odderon and a singularity is that a singularity must feature two odderon packets which orbit one another in order to meet the criteria. In the case of a singularity, mesons are projected from the south pole of the singularity and leptons from the north, with these particles being suppressed in the case of the hidden but ubiquitous singularities found in ordinary stars which feature enough hydrogen to absorb these mesons and leptons. The internal dynamics of the singularities, themselves, has been previously circumscribed by this author.

What has not been previously expressed by any source, thus far, is a more bold claim: That neutron stars do not exist. That is to say, what have been identified as neutron stars are not what astronomers believe they are. These neutron stars are not visible to optical telescopes and were only discovered after the invention of radio telescopes capable of detecting X-Ray and other non-visible emissions. "Neutron stars," I would posit, were a way of explaining these "cool" stars which had previously escaped notice.

Neutron stars are, I posit, the remnants of ordinary stars which did not have sufficient mass to supernova. The idea that stars must have at least a certain amount of mass to ultimately supernova is one of the few accurate portions of the current standard model of internal stellar dynamics, but that model does not specify the reason why this is so. I will now endeavor to explain why both of these things are so.

Also requiring explanation is the fact that stars are long-lived (with lifespans measured in the billions of years) despite having a limited fuel source. Outrageously, the astronomical community continues to suggest that the long-lived nature of stars can be explained through a form of time dilation in which the explosion of a star happens in slow motion due to extreme gravitational conditions. Thus, the explanation I am going to offer is being crafted to satisfy the need to explain all of the following: Why stars are long-lived, what neutron stars are and what it is that triggers supernovae.

Firstly, it is important to have a plausible thesis concerning the fusion process, itself. The current doctrine holds that the core of the Sun is the hottest portion and that fusion occurs in the core. Of course, if progressively heavier elements

are synthesized by the Sun and these elements need to "go somewhere," it would make sense that they would settle to the core. If they did so, however, would not they interfere with the fusion process?

Heavier elements, indeed, do settle to the core of stars, but the idea that fusion is concentrated in this area is specious. The heavier elements are drawn to the core by the attractive force of the singularity at the core, which acts more strongly upon heavier elements than lighter ones. As this core grows in diameter, the core cools. In a middle-aged star, the core is substantially cooler than the area where active fusion is taking place (what might be termed the mantle of the star) and the core, as the star ages, comes to be composed chiefly of elements such as iron and even heavier elements not predicted by the standard model including cobalt, nickel and small amounts of copper in some cases. This would account for why zinc is the most abundant element in the Earth's crust as nickel, which is abundant in the Earth's core, when it makes its way through magma flows to sub-floor saltwater chambers where it is eventually converted into zinc, more readily takes on two new hydrogens from water at a time than one. There is therefore an increased likelihood of a nickel-to-zinc conversion i.e 28 to 30 protons versus a nickel-to-copper conversion i.e. 28 to 29 protons.

The standard model contends that hydrogen, once it is transmuted into helium within a star, never reverts back into hydrogen and eventually goes on to become heavier elements. While some helium is destined to be transmuted into heavier elements, naturally, the longevity of the stars can only be explained through a fusion-fission-fusion cycle in which hydrogen converts to helium and then back again into hydrogen nearly endlessly. This would account for why a fixed fuel source could continue to generate energy over a span of billions of years. This kind of a process could easily be explained through fission induced by an abundance of circulating electrons/photons. Given sufficient intensity, electrons are every bit as capable of the generation of fission events as neutrons. *Protons moving at high energies within a star in proximity to one another result in the generation of gluons and odderons, which locally pull together protons, creating helium. Neutrons are conjured by this process as they naturally materialize when gluon streams converge, creating appropriate numbers of quarks.* Once established as helium, a great deal of heat having been generated by the fusion event, light generated by other fusion events bombards the helium, which always has a chance of fissioning. Thus, hydrogen and helium recycle between their status as these two elements a great many times during the life of a star. The only limitation on the lifespan of a star is the tendency toward offgassing and the eventual synthesis of copper, which is anathema to a star for reasons I will, shortly, explain.

While the central mass of a star is held together by the strong nuclear force of a singularity, once a fusion reaction begins in a new star, a magnetic field is established which constrains the hydrogen gas. It is generally understood (correctly) that the magnetic field contains the hydrogen and that when the field is temporarily weakened, coronal mass ejections are the result. Eventually, all of

the hydrogen content bleeds off and a star ceases to produce meaningful amounts of heat and light.

As a star ages, it accumulates progressively heavier elements in the core, approaching element 29, copper. If a star is large enough to reach this point in elemental synthesis prior to the offgassing of its hydrogen, it spells trouble for the star. If a star creates copper by adding a proton to nickel, copper, given that it lends itself to the generation of its own magnetic field when current is passed through it (as in any coil electromagnet,) it can be predicted to undergo a destabilization of the magnetic field created by its liquid metallic core.

As fusion is occurring in the mantle of stars and not the core, the mantle i.e. the plasma, as a whole, is projecting intense electromagnetism of all frequencies *both outward and inward*. This means that if copper is created in substantial quantities around the core (near the singularity) the direction of the flow of electromagnetism will dictate that a new Magnetic North is created which projects magnetic force toward the singularity. For a star, this is devastating.

The magnetic force pressing against the singularity causes it to relocate from the exact center of the star to some off-center point near the periphery of the metallic core, which exists as a liquid rather than a gas due to high pressures. As it is a liquid, it has its own discrete magnetism (not unlike the Earth's core) which aligns with the magnetic field of the plasma of the star more generally. Ordinarily, the North of the metallic portion of a star aligns seamlessly with the North of the plasma (preventing our ability to discern the presence of a second, overlapping field.)

A supernova is the result of copper being synthesized in the metallic core region which, in conjunction with projected electromagnetism originating from the fusion-fission-fusion cycle-associated activity in the above mantle, disjoints the singularity from its central position. In so doing, it indirectly causes the core to begin to migrate to the new, off-center position of the singularity. As it is a liquid, the magnetic polarization of the metallic core is mutable. In the process, the Magnetic North projected by the metallic liquid core shifts to a point which is out of alignment with the Magnetic North of the plasma, resulting in competing fields which create a shearing effect which allows the entire hydrogen envelope to escape at once. Specifically, the misalignment of the core-associated magnetic field results in decreased convection of electrons in the plasma and a halt to the fissioning process required to restart the fusion-fission-fusion cycle. This results in the plasma's own field strength dropping and the escape of the hydrogen component of the hydrogen/helium mixture, which becomes stratified. This, in turn, causes the suspension of the magnetic field to become permanent, the ejection of the remainder of the hydrogen/helium envelope and the decompression of pressurized metallic liquids which eventually become meteors after being temporarily converted into a gas, a process which allows them to be projected at substantial velocity by the supernova, thus escaping the attractive force of the singularity. These materials become the basis of new planets, in keeping with the established doctrine.

Naturally, as there is still an active singularity, not all of this metallic content can escape. The remaining metallic component, whether there was a supernova or not, continues to be slowly consumed by the singularity, which generates large quantities of X-Rays during this process of consumption but any visible light this process may generate is blocked by the metallic body. The density of these bodies is no greater than that of any other body of iron, cobalt and nickel. These bodies absolutely contain electrons, contrary to the doctrine which states that they are compacted to the point of pushing out all electrons.

Conclusion

Also in need of revision are those components of the astronomical standard model which suggest that stars grow larger as they age, grow red in color as they age, etc. As offgassing occurs, the size and mass of a star marginally decreases. Neutron stars, perhaps more appropriately termed *decrepit stars*, similarly shrink over time. The idea that a magnetic contour around a star is going to shift to a point a greater distance away from the star as a result of a weakening of a magnetic field (supposedly causing the gas to occupy a larger volume despite there being less of it) is an idea which must have been proposed by someone who did not understand how magnetic fields work. A weakened magnetic field associated with sputtering fusion would feature a boundary which moves to a point closer to the core, resulting in shrinkage of a dying star, not expansion. This is not unlike a malting process.

It occurs to this author that as we continue to study the Sun, we may be tempted to send probes which either by design or by accident plunge into it. Although small quantities of copper such as those in the Parker Solar Probe are unlikely to cause problems, we must take care not to allow substantial copper bodies to enter our star given this new insight. The addition of more than a few thousand kilograms of copper to the center of the Sun would likely lead to increased flare activity and eventually, decreased heat and light generation. As there is no way to remove copper from the center of a star once it is deposited, we must also be mindful of the possibility that the unintended ingestion of copper by a given star could have catastrophic consequences.

In Gene Roddenberry's Andromeda, a fictitious weapon called a "Nova Bomb" was described which was capable of destroying entire star systems by causing supernova explosions. If interstellar warfare is ever discovered to be a reality, such a weapon could, if this theory proves true, be as simple as an ordinary copper block. One would only need a mechanism for delivery of a large mass of copper in order to achieve such an effect.

More disturbingly, the fact that we now both know how to destroy stars and know how to propel a craft at sufficient velocity to arrive in a matter of a few years in a neighboring star system (photo-magnetic propulsion) indicates that in the span of time from 1945 to 2024, we have suddenly leapt from being able to merely end life on Earth to having an ability to end it for an alien civilization.

Can a race which has not moved past the self-destructive behavior of warfare be entrusted with this type of power?